

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
AIKEN DIVISION

State of South Carolina,
Plaintiff,
v.
United States;
United States Department of Energy;
Rick Perry, in his official capacity as
Secretary of Energy;
National Nuclear Security Administration;
and
Lisa E. Gordon-Hagerty, in her official
capacity as Administrator of the National
Nuclear Security Administration and
Undersecretary for Nuclear Security,
Defendants.

Civil Action No.: 1:18-cv-01431-JMC

PRELIMINARY INJUNCTION ORDER

This matter is before the court pursuant to Plaintiff State of South Carolina’s (“the State”) Motion for Preliminary Injunction to prevent the Department of Energy (“DOE”) and the National Nuclear Security Administration (“NNSA”) and their officials (collectively, “the Federal Defendants”) from terminating the mixed oxide fuel fabrication facility project (“MOX Facility” or “Project”) currently under construction at the Savannah River Site (“SRS”) in Aiken County, South Carolina until this case can be decided on its merits. (ECF No. 5.) On June 4, 2018, the Federal Defendants filed a response in opposition (ECF No. 19). For the reasons set forth below, the court GRANTS the State’s Motion for Preliminary Injunction (ECF No. 5).

I. RELEVANT FACTUAL AND PROCEDURAL BACKGROUND

Following the end of the Cold War and the collapse of the Soviet Union, significant quantities of nuclear weapons, including large amounts of weapons grade plutonium, became surplus to the defense needs of the United States and Russia. Control of these surplus materials became an urgent U.S. foreign policy goal, with a particular focus on nuclear weapons. In an effort to consolidate and reduce surplus weapons-grade plutonium, the United States and Russia jointly developed a plan for the nonproliferation of weapons of mass destruction worldwide.¹

After extensive study, including an environmental impact statement (“EIS”) conducted pursuant to National Environmental Policy Act, 42 U.S.C.A. §§ 4321-4370h (“NEPA”) in 1996, DOE concluded that the “preferred alternative” for plutonium disposition consisted of a dual-path strategy that proposed (1) immobilization of a portion of the surplus plutonium in glass or ceramic materials and (2) irradiation of the remaining plutonium in MOX fuel. DOE also analyzed the environmental impacts of various alternatives for the “long term” storage of plutonium and other nuclear materials for up to fifty years.² The following year, DOE announced its intention to pursue this dual-path strategy, including the construction and operation of a MOX fuel fabrication facility.

In November 1999, after further evaluating the alternatives for surplus plutonium disposition, DOE issued the *Surplus Plutonium Disposition Final EIS* (“SPD EIS”).³ DOE also analyzed a “No Action Alternative” that did not involve disposition of any surplus plutonium but

¹ See Compl. Ex. 6, Excerpt from D.J. Spellman et al., *History of the U.S. Weapons-Usable Plutonium Disposition Program Leading to DOE’s Record of Decision 2* (1997) (detailing important events and studies concerning surplus weapons-usable plutonium disposition).

² See Compl. Ex. 7, NNSA, *Report to Congress: Disposition of Surplus Defense Plutonium at Savannah River Site 2-1* (Feb. 15, 2002) (hereinafter *Report to Congress*); Compl. Ex. 9, DOE, Record of Decision (ROD) for *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement (PEIS)* (Jan. 21, 1997), 62 Fed. Reg. 3014.

³ Compl. Ex. 11, DOE, Excerpt from SPD EIS, Vol. I – Part A, at 1-3 (Nov. 1999).

rather addressed storage of the plutonium in accordance with its previous analysis of the impacts of continued storage of the surplus plutonium for a period up to 50 years.⁴ DOE again concluded that the “Preferred Alternative” was the hybrid approach to immobilize surplus weapons-grade plutonium in glass and ceramic materials and to irradiate the remaining plutonium in MOX fuel in existing domestic, commercial reactors.⁵ DOE selected SRS as the preferred site to implement both of these approaches and upon which to construct and operate the MOX Facility.

In 1999, DOE signed a contract with a consortium, now CB&I AREVA MOX Services, LLC (“MOX Services”), to design, build, and operate the MOX Facility.⁶ On or about February 28, 2001, MOX Services submitted a request to the U.S. Nuclear Regulatory Commission (“NRC”) for a license to construct the MOX Facility at SRS.⁷ In late 2001, Congress directed DOE to provide, not later than February 1, 2002, a plan for the disposal of surplus defense plutonium located at SRS and to be shipped to SRS in the future. Congress also required the Secretary of Energy to:

- Consult with the Governor of South Carolina regarding “any decisions or plans of the Secretary related to the disposition of surplus defense plutonium and defense plutonium materials located at [SRS];”
- Submit a report to the congressional defense committees providing notice for each shipment of defense plutonium and defense plutonium materials to SRS;
- If DOE decides not to proceed with construction of the immobilization facilities or the MOX Facility, prepare a plan that identifies a disposition path for all defense plutonium and defense plutonium materials; and
- Include with the budget justification materials submitted to Congress in support of DOE’s budget for each fiscal year “a report setting forth the extent to which amounts requested for the [DOE] for such fiscal year for fissile materials

⁴ *Id.*

⁵ *Id.* at 1-10 to 1-11.

⁶ See Compl. Ex. 12, DOE, Excerpt from *SPD EIS*, Summary, at S-1 (Nov. 1999); Compl. Ex. 13, DOE, ROD for *SPD EIS* (Jan. 11, 2000), 65 Fed. Reg. 1608.

⁷ See Compl. Ex. 16, NRC, Excerpt from *Environmental Impact Statement on the Construction and Operation of a Proposed Mixed Oxide Fuel Fabrication Facility at Savannah River Site, South Carolina* 1-3 (Jan. 2005) (NRC EIS).

disposition activities will enable the [DOE] to meet commitments for the disposition of surplus defense plutonium and defense plutonium materials located at [SRS]....”⁸

In 2002, DOE decided not to proceed with the immobilization portion of the hybrid strategy, leaving the construction and operation of the MOX Facility as the only strategy to dispose of surplus plutonium in the United States. In 2003, Congress enacted statutory requirements for DOE’s construction and operation of the MOX Facility.⁹ Specifically, Section 2566 provides the Congressional mandate for the “construction and operation of [the MOX Facility]” and requires DOE to achieve the “MOX production objective” by producing mixed-oxide fuel from defense plutonium and defense plutonium materials at an average rate of no less than one metric ton of mixed-oxide fuel per year.¹⁰

In 2005, DOE began transferring plutonium to SRS for conversion into MOX fuel.¹¹ This plutonium was in addition to the several tons of plutonium that already existed at SRS. On or about March 30, 2005, after its own evaluation and analysis, NRC issued a license for construction to MOX Services finding, among other things, that radiation exposure to the public is greater in a “no action” alternative than with the Project and noting that “continued storage would result in higher annual impacts” of public radiation exposure than implementation of the Project.¹² Construction began on the MOX Facility on or about August 1, 2007.

⁸ National Defense Authorization Act for Fiscal Year 2002 (NDAA FY02), Pub. L. No. 107-107, 115 Stat. 1378, § 3155.

⁹ NDAA FY03, Subtitle E, § 3182, *subsequently codified by* NDAA FY04 as 50 U.S.C.A. § 2566.

¹⁰ 50 U.S.C.A. § 2566(a), (h).

¹¹ *See* Compl. Ex. 21, DOE, *Storage of Surplus Plutonium Materials at the Savannah River Site Supplemental Analysis* (Sept. 5, 2007).

¹² Compl. Ex. 16, Excerpt from NRC EIS at 4-96.

In 2014, the Federal Defendants sought to abandon the Project by trying to place the MOX Facility into “cold standby.” The State filed a lawsuit before the court, and the Federal Defendants then agreed to continue construction of the Project in compliance with law. The case was resolved through a stipulation of dismissal and dismissed without prejudice.¹³ Since then, DOE’s budget requests have all requested funding to terminate construction of the MOX Facility. However, Congress has specifically required the DOE and NNSA to utilize any MOX-specific appropriations for the construction of the MOX Facility, denying and rebuffing the attempts by DOE and NNSA to utilize Congressional appropriations to terminate the Project. Nevertheless, DOE has continuously sought termination of the MOX Project and has advocated for its proposed “Dilute and Dispose” alternative (also referred to as “downblending”), under which DOE would prepare surplus non-pit plutonium at SRS for disposal at the Waste Isolation Pilot Plant (“WIPP”) near Carlsbad, New Mexico.

On December 20, 2017, the court issued an Injunction Order instructing the Federal Defendants that within two years from the entry of the Order, they “must remove from the State of South Carolina, for storage or disposal elsewhere, not less than one metric ton of defense plutonium or defense plutonium materials, as defined by 50 U.S.C. § 2566.” (*See State of South Carolina v. United States et al*, C/A No.: 1:16-cv-00391-JMC (ECF No. 109.) On February 2, 2018, the Federal Defendants appealed the court’s Injunctive Order. (*See id.* at ECF No. 113.)

Despite the Federal Defendants’ new preferred alternative, Congress has continued to require DOE to pursue construction of the MOX Facility. Congress specified that the Secretary can avoid this mandate *only* if the Secretary submits to the Congressional defense committees:

- (A) the commitment of the Secretary to remove plutonium intended to be disposed of in the MOX facility from South Carolina and ensure a

¹³ *South Carolina v. U.S. Dep’t of Energy*, 1:14-cv-00975-JMC (ECF No. 19).

sustainable future for the Savannah River Site;

(B) a certification that—

- (i) an alternative option for carrying out the plutonium disposition program for the same amount of plutonium as the amount of plutonium intended to be disposed of in the MOX facility exists, meeting the requirements of the Business Operating Procedure of the National Nuclear Security Administration entitled ‘Analysis of Alternatives’ and dated March 14, 2016 (BOP–03.07); and
- (ii) the remaining lifecycle cost, determined in a manner comparable to the cost estimating and assessment best practices of the Government Accountability Office, as found in the document of the Government Accountability Office entitled ‘Government Accountability Office (“GAO”) Cost Estimating and Assessment Guide’ (GAO–09–3SP), for the alternative option would be less than approximately half of the estimated remaining lifecycle cost of the mixed oxide fuel program; and

(C) the details of any statutory or regulatory changes necessary to complete the alternative option.¹⁴

In making the certification under Section 3121(b)(1)(B), the Secretary also must ensure that the estimates used “are of comparable accuracy.” National Defense Authorization Act (“NDAA”) FY18, § 3121(b)(2).¹⁵

¹⁴ NDAA FY18, § 3121(b)(1).

¹⁵ The NDAA FY 2018 is an act that was signed into law by the President on December 12, 2017, which authorizes fiscal year 2018 appropriations and sets forth policies for Department of Defense (“DOD”) programs and activities, including military personnel strengths. Pub. L. No. 115-91. Section 3121 of the NDAA FY 2018 provides that the Secretary of Energy *shall* use the funds appropriated for the construction of the MOX Facility for the aforementioned uses, unless he waives the requirement pursuant to subsection (b). Subsection (b) requires that the Secretary submits to Congress “the commitment of the Secretary to remove Plutonium” from South Carolina and a certification that “an alternative option for carrying out the plutonium disposition program for the same amount of plutonium . . . exists,” the remaining lifecycle cost . . . for the alternative option would be less than approximately half of the estimated remaining lifecycle cost of the [MOX] program,” and the details of any statutory or regulatory changes necessary to complete the alternative. § 3121(b)(1).

On or about May 10, 2018, DOE notified Congress of the Federal Defendants' decision to terminate and cease construction of the MOX Facility and its intent to pursue the "Dilute and Dispose approach to plutonium disposition."¹⁶ The Secretary further stated that the requirements of Section 3121 of NDAA FY 18 and Section 309 of the Consolidated Appropriations Act ("CAA") FY18¹⁷ had been met and that he therefore was exercising his authority to "cease MOX construction." DOE and NNSA issued a Partial Stop Work Order on May 14, 2018 that halted any new contracts or new hires at SRS for the MOX Project.¹⁸ DOE and NNSA intend to issue a full stop work order to begin the wind-down of the MOX Project and termination of employees on the MOX Project on or about Monday, June 11, 2018. (ECF No. 19-1 ¶ 10.)

The State's present Motion requests that the court, by way of a preliminary injunction, bar the Federal Defendants and those under their supervision from terminating or stopping work on the Project. (*See* ECF No. 5). On June 4, 2018, the Federal Defendants filed a response in opposition (ECF No. 19), and on June 6, 2018, the State filed a reply (ECF No. 21). A hearing on this matter occurred on June 5, 2018 (ECF No. 20).

¹⁶ Compl. Ex. 1, May 10, 2018 Secretary Perry Letter; Compl. Ex. 29, NNSA, *Surplus Plutonium Disposition Dilute and Dispose Option Independent Cost Estimate (ICE) Report*.

¹⁷ The Consolidated Appropriations Act, 2018 ("CAA FY18") is an act that was signed into law by the President on March 23, 2018, which requires the Secretary of Energy to use all funds allocated this year and previously for construction of the MOX Project for such use unless the Secretary waives the requirement in accordance with NDAA FY18 § 3121. Pub. L. 115-141 § 309. If the Secretary makes a waiver under the NDAA, CAA FY18 also requires that he "submit to the Committees on Appropriations of both Houses of Congress the lifecycle cost estimate used to make the certification under Section 3121(b)" and he "may not use funds provided for the Project to eliminate such Project until" 30 days later. § 309(c).

¹⁸ Compl. Ex. 30, May 14, 2018 NNSA Letter to CB&I AREVA MOX Services, LLC RE: Contract DE-AC02-99CH10888 (Mixed Oxide Fuel Fabrication Facility).

II. JURISDICTION

A. Standing

Standing is established where (1) there is an injury in fact; (2) the injury is “fairly traceable to the challenged action,” and (3) it is likely that the alleged injury “will be redressed by a favorable decision.” *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). Further, standing is established when a plaintiff’s legal action arguably falls within the “zone of interests” Congress intended to protect. *See, e.g., Clarke v. Sec. Indus. Ass’n*, 479 U.S. 388, 399 (1987) (“The “zone of interest” test is a guide for deciding whether, in view of Congress’ evident intent to make agency action presumptively reviewable, a particular plaintiff should be heard to complain of a particular agency decision.”).

1. Injury in Fact

The State has alleged three separate injuries. (ECF No. 21 at 3.) The State alleges an economic injury, a procedural injury, and an environmental injury. (*Id.*) The Federal Defendants challenge the sufficiency of each of these injuries to fulfil the injury in fact requirement to support standing.

The State asserts two forms of economic injury. First, the State argues that it will suffer an economic injury as a result of the decreased tax revenue stemming from the termination of the MOX Project. (ECF No. 5 at 26.) In short, the State’s argument is that the employees at the MOX Project pay taxes to the State, and the termination of the MOX Project would lead to their unemployment, which would decrease the State’s tax revenues. However, a state cannot bring a *parens patriae* action on behalf of its citizens to protect them from actions by the federal government. *Massachusetts v. Mellon*, 262 U.S. 447, 485-86 (1923).

Further, the State's assertion that it is injured because individuals who are no longer employed on the construction of the MOX Facility will not pay the same amount of income taxes to the State fails to constitute an injury in fact. If a state is allowed to sue the federal government any time any federal action causes a generalized economic harm, such suits would dramatically expand the circumstances under which state governments are able to sue the United States. The courts that have considered such theories have accordingly rejected the notion that a state government can sue the United States based on such harm. *See Pennsylvania v. Kleppe*, 533 F.2d 668, 672 (D.C. Cir. 1976) (“the unavoidable economic repercussions of virtually all federal policies suggest[s] to us that impairment of state revenues should not, in general, be recognized as sufficient injury in fact to support state standing.”); *Iowa ex rel. Miller v. Block*, 77 F.2d 347, 353 (8th Cir. 1985).

Secondly, the State posits that the termination of the Project would result in an economic injury because it was supposed to be an economic benefit to the State. (ECF No. 21 at 3.) The State quotes the Bob Stump National Defense Authorization Act for Fiscal Year 2003, which states that the MOX Project “will also be economically beneficial to the State of South Carolina, and that economic benefit will not be fully realized unless the MOX facility is built.” Pub. L. No. 107-314, 116 Stat. 2458, Subtitle E, § 3181. It is true that the MOX Project would have economic benefit for the State. However, the court does not equate a statement of purpose with the creation of a cause of action. Therefore, this theory also fails to satisfy the injury in fact requirement.

The State also argues that it suffered two procedural harms as a result of the May 10, 2018 decisions. First, the State alleges that the Federal Defendants failed to adequately consult the Governor of South Carolina, as required by 50 U.S.C. § 2567(a), prior to making a decision “related to the disposition of surplus defense plutonium and defense plutonium materials located

at the Savannah River Site, Aiken, South Carolina,” § 2567(a). (ECF No. 21 at 3.) Courts have held that while it is difficult to quantify the exact effect of a failure to consult, the party is clearly injured. *See Cal. Wilderness Coal. v. U.S. Dep’t of Energy*, 631 F.3d 1072, 1087 (9th Cir. 2011) (“[W]e note that although the nature of consultation makes it difficult to determine the precise consequences of its absence, the prejudice to the party excluded is obvious.”). Thus, the Federal Defendants’ failure to consult with the Governor prior to making a decision regarding the MOX Project creates an injury in fact.

Additionally, the State argues that it has suffered an injury in fact because of the Federal Defendants’ failure to conform with the requirements of NEPA. (ECF No. 21 at 2.) “[I]ndividuals living next to [a federal project requiring NEPA analysis] possess standing to challenge a failure to comply with NEPA.” *Hodges v. Abraham*, 300 F.3d 432, 444-45 (4th Cir. 2002) (citing *Lujan*, 504 U.S. at 572 n.7). Similar to Governor Hodges, the plaintiff in *Hodges*, the State has standing here to challenge the Federal Defendants’ failure to comply with NEPA because the State owns extensive property adjoining, and one road traversing, the impacted area. (*See* ECF No. 1 at ¶ 5.)

Lastly, the State argues that it has suffered an environmental injury as a result of the May 10, 2018 decisions. “[W]hen a decision to which NEPA obligations attach is made without the informed environmental considerations that NEPA requires, the harm that NEPA intends to prevent has been suffered.” *W. N.C. All. v. N.C. Dep’t of Transp.*, 312 F. Supp. 2d 765, 778 (E.D.N.C. 2003). It is the State’s environment that is placed at risk as a result of the Federal Defendants’ failure to comply with NEPA. Therefore, the State has suffered an injury in fact.

Accordingly, the State has suffered procedural and environmental harms such that it has satisfied the injury in fact requirement.

2. *Causation and Redressability*

The procedural and environmental injuries discussed above are directly traceable to the Federal Defendants' decision to terminate the MOX Facility. The court is able to redress the procedural and environmental injuries. Accordingly, the State has satisfied the standing requirements to sue for violations of NEPA and NDAA FY 18.

B. Administrative Procedure Act (“APA”) Jurisdiction

The APA, 5 U.S.C.A. §§ 701 *et seq.*, provides judicial review of final agency actions for which there is no other adequate remedy in a court. 5 U.S.C.A. § 704. A reviewing court shall hold unlawful and set aside agency action found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law, or in excess of statutory jurisdiction or authority, or without observance of procedure required by law. 5 U.S.C.A. § 706. An agency decision is:

arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); *Ohio River Valley Envtl. Coalition, Inc. v. Kempthorne*, 473 F.3d 94, 102 (4th Cir. 2006) (same) (quoting *Motor Vehicle Mfrs.*). Accordingly, “the agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Mfrs.*, 463 U.S. at 43 (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

The Federal Defendants contend that the May 10 decision did not constitute the final agency action to terminate the MOX Facility, but instead was only “information reporting” to Congress, and thus, the State’s claims are not justiciable or subject to judicial review under the

APA. (ECF No. 19 at 20-22.) This assertion is directly refuted by the Federal Defendants' own affidavits. In support of their Response, the Federal Defendants submitted the declaration of Robert Raines, the DOE official responsible for MOX construction (and MOX termination), who testified:

The Secretary exercised the authorities given to him by the Congress on May 10, 2018 and on May 14, 2018 a partial stop work order was issued to minimize cos[t] to the government during the 30 day period leading up to an eventual full stop work order and *the termination letter expected to be issued on June 11, 2018.*

(ECF No. 19-1 ¶ 10) (emphasis added). Mr. Raines further testified regarding the “issuance of the NNSA Contract Termination Notice [for June 11, 2018,]” (*id.* ¶ 18), the “termination notice date,” (*id.* ¶ 19), and the “termination of the MOX Project,” (*id.* ¶ 20). In addition, the Federal Defendants submitted the declaration of William Harris Walker, NNSA Director of Intergovernmental Affairs, who testified about “*the execution of the MOX termination waiver.*” (ECF No. 19-9 ¶ 7) (emphasis added). Accordingly, the Federal Defendants' contention that there has not been a final agency action to terminate the MOX Facility is directly refuted by the evidence submitted by the Federal Defendants and the practical reality that the full stop work order that is planned for June 11, 2018 will shut down the MOX Facility.

Moreover, because the Federal Defendants' purported commitments and certifications set forth in the May 10 termination letter have legal consequences—namely leaving plutonium at SRS indefinitely and without the required environmental analysis under NEPA to determine the environmental consequences on the State and the potential alternatives—they consequently are reviewable by the court under the APA. “For an action to be “final” under the APA, it should (1) mark the conclusion of the agency's decision-making process; and (2) be an action by which rights or obligations have been determined or from which legal consequences flow.” *Bennett v. Spear*, 520 U.S. 154, 177–78 (1997). A person suffering legal wrong because of agency action,

or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof. 5 U.S.C.A. §§ 702, 704, 706. Deciding whether the Federal Defendants' May 10 termination letter constituted final agency action therefore is based on "whether the agency has completed its decision-making process, and whether the result of that process is one that will directly affect the parties." *Franklin v. Massachusetts*, 505 U.S. 788, 792 (1992).

In *Chamblee v. Espy*, 100 F.3d 15 (4th Cir. 1996), the Fourth Circuit recognized this exact framework and that it is proper to consider the legal consequences that flow from the "practical effects" of an agency action. There, the Farmers Home Administration suspended a loan servicing request and argued that no final agency action had occurred because the suspension was "simply a pause in the decision-making process, which [would] be reactivated" at a later date. *Chamblee*, 100 F.3d at 18. The court held, however, that "[t]his argument overlooks the effect of the agency's decisions" which was to deny the request and, thus, "amounts to final agency action [that is] subject to judicial review according to the APA." *Id.*; see *Kershaw v. Resolution Tr. Corp.*, 987 F.2d 1206, 1208 (5th Cir.1993) ("In determining the finality of agency action a court should consider the "practical effect of the [agency's] determination.").

In the context of the Federal Defendants' actions, Section 3121 of the NDAA FY 2018 sets forth the general rule that the Secretary "shall carry out construction relating to the MOX facility" and can avoid this mandate *only* if he makes certain commitments and certifications. If the DOE action is allowed to stand, the contract with the MOX construction contractor will be terminated and the substantial labor force currently constructing the MOX Facility will be disbanded. At that point, the court's decision becomes irrelevant as there would be no feasible way to revive the MOX Project, there is no remedy for the NEPA violation, and no feasible

alternative to plutonium removal.

In making the contention that the State's claims are not justiciable, the Federal Defendants primarily rely upon the holding in *Nat'l Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288 (D.C. Cir. 1988) to argue "[t]he sufficiency of [an] agency's *response* to Congress is . . . not justiciable pursuant to the APA." (ECF No. 19 at 20) (emphasis added). In *Hodel*, the statute at issue directed the Secretary of the Interior to "indicate in detail to the President and Congress" its reasons for rejecting lease proposals under an Outer Continental Shelf gas and oil leasing program. *Hodel*, 865 F.2d at 316 (internal quotations omitted). The plaintiffs contended that the Secretary failed to provide adequate explanations for the rejection of certain proposals. In rejecting plaintiffs' claims, the *Hodel* court determined that the report was a "commonplace requirement" where "the designated Executive Branch officer is simply reporting back to the source of its delegated power in accordance with the Article I branch's instructions." *Id.* at 317, 318. Moreover, the court found that there was no basis "for formulating judicially manageable standards by which to gauge the fidelity of the Secretary's response to the strictures of" the statute. *Id.* at 318.

Despite the Federal Defendants attempt to characterize their obligations as mere "notifications," "responses," and "reports," the commitments and certifications required by NDAA FY18 are much more than a "purely informational" report that is "primarily a tool for [Congress'] own use without cognizable legal consequences." *Guerrero v. Clinton*, 157 F.3d 1190, 1195, 1197 (9th Cir. 1988). Nor do they amount to simple "federal reporting requirements" with "no standards which this court could apply" and which "do[] not involve the enforcement of . . . any other Act of Congress." *Greenpeace USA v. Stone*, 748 F. Supp. 749, 766 (D. Haw. 1990).

Instead, the purported commitments and certifications in DOE's May 10 letter represent the completion of its decision-making process to terminate the MOX Project. In contrast to the issues presented in *Hodel*, *Guerrero*, and *Greenpeace*, the Federal Defendants' termination of the MOX Facility and their deficient commitment and certification have direct legal consequences on the State and its statutory right to the removal of plutonium. Because the MOX Project is the only legally authorized disposition method for MOXable plutonium at SRS, the Federal Defendants' commitments and certifications not only terminate the MOX Project, but also leave no legally approved or funded pathway for disposition. The practical effect of these wrongful actions is that the plutonium will remain at SRS indefinitely.

Therefore, because the May 10 letter, and the purported commitments and certifications set forth therein, represent the final agency action to terminate the MOX Facility, and this action has significant legal consequences, the State's claims under the APA are justiciable.

III. LEGAL STANDARD

In order to obtain a preliminary injunction, a party must demonstrate: "(1) that [it] is likely to succeed on the merits, (2) that [it] is likely to suffer irreparable harm in the absence of preliminary relief, (3) that the balance of equities tips in [its] favor, and (4) that an injunction is in the public interest." *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 19–20 (2008). "The traditional office of a preliminary injunction is to protect the status quo and to prevent irreparable harm during the pendency of a lawsuit ultimately to preserve the court's ability to render a meaningful judgment on the merits." *In re Microsoft Corp. Antitrust Litig.*, 333 F.3d 517, 525 (4th Cir. 2003); see *Omega World Travel, Inc. v. Trans World Airlines*, 111 F.3d 14, 16 (4th Cir. 1997) ("The purpose of interim equitable relief is to protect the movant, during the pendency of the action, from being harmed or further harmed in the manner in which the movant contends it was

or will be harmed through the illegality alleged in the complaint.”). The Fourth Circuit has defined the status quo as the “last uncontested status between the parties which preceded the controversy.” *Pashby v. Delia*, 709 F.3d 307, 320 (4th Cir. 2013).

IV. ANALYSIS

A. Success on the Merits

1. Violation of 50 U.S.C.A. § 2567 – Failure to Consult with the Governor of South Carolina

The State is not likely to succeed on the merits of its claim that 50 U.S.C.A. § 2567(a) was violated by the Secretary of Energy’s failure to consult with Governor McMaster prior to reaching his May 10, 2018 decisions. An agency that has been statutorily directed to consult with a state government during the course of agency decision-making must conduct the consultation prior to reaching its decision—and consultation is more than “notice and comment” of an agency action. *Cal. Wilderness Coal. v. U.S. Dep’t of Energy*, 631 F.3d 1072, 1087 (9th Cir. 2011). Further, where a federal agency is required to do an act “in consultation with” another agency, the requisite consultation must be made before the agency takes action. *N. Cal. River Watch v. Wilcox*, 633 F.3d 766, 774 (9th Cir. 2011) (noting that the language “in consultation with” Section 7 of the Endangered Species Act requires consultation before the agency reaches a decision); *see also Natl. Wildlife Fed’n v. Coleman*, 529 F.2d 359, 371 (5th Cir. 1976) (“in consultation with” language requires meaningful consultation prior to reaching a final agency decision).

A federal agency should apply the ordinary meaning of the word consult when Congress has directed it to consult with outside parties:

[a]n ordinary meaning of the word consult is to ‘seek information or advice from (someone with expertise in a particular area)’ or to ‘have discussions or confer with (someone), typically *before* undertaking a course of action.’ We conclude that this is the definition that Congress intended when it directed DOE to prepare the [study] ‘in consultation with the affected States.’ Thus, DOE was to confer with

the affected States before it completed the study.

Cal. Wilderness Coal., 631 F.3d at 1087 (quoting *The New Oxford Dictionary* 369 (2001)) (emphasis in original). An agency violates its statutory mandate to consult where it fails to conduct the consultation prior to reaching its decision. *Silver v. Babbitt*, 924 F. Supp. 976, 985 (D. Ariz. 1995).

Here, Section 2567(a), titled “Consultation required,” provides that the Secretary of Energy *shall consult* with the Governor of the State of South Carolina regarding any decisions or plans of the Secretary related to the disposition of defense plutonium and defense plutonium materials at SRS. 50 U.S.C.A. § 2567(a). That language is mandatory. *See Nat’l R.R. Passenger Corp. v. Morgan*, 536 U.S. 101, 109 (2002) (noting that the word “shall” provides no discretion). Both the decision to terminate the MOX Project and the decision to pursue the Dilute and Dispose approach relate to the disposition of surplus defense plutonium and defense plutonium materials at SRS.¹⁹

The State’s claim fails because the facts of this case show that the Governor was consulted prior to the Secretary’s issuance of the May 10, 2018 decisions. Governor McMaster notes that there were “several communications” in which he provided his “concerns” to the DOE about its “direction of the MOX Project and proposed Dilute and Dispose approach.” (ECF No. 5-2 ¶ 6.) In August 2017, the DOE staff hosted a tour of the MOX Facility for the Governor and his senior policy advisor and provided briefings and discussions about the MOX Project. (ECF No. 19-9 ¶ 4.) On January 31, 2018, Governor McMaster, Attorney General Wilson, and other high-ranking state officials visited DOE headquarters in Washington, DC and participated in a substantive meeting with high-ranking agency officials, in which they voiced their concerns about the possibility of the DOE using the Dilute and Dispose alternative option to remove plutonium from

¹⁹ Comp. ¶¶ 116-17; Compl. Ex. 1, May 10, 2018 Secretary Perry Letter.

South Carolina instead of continuing with construction of the MOX Facility. (*Id.* at ¶ 5.) In February and March of 2018, the Federal Defendants made efforts to schedule more meetings with the Governor to discuss the MOX Facility, but those meetings were not ultimately scheduled. (*Id.* at ¶ 6.)

California Wilderness Coalition is distinguishable from the instant case. In *California Wilderness Coalition*, the agency had provided an opportunity for consultations for the states that was no different from opportunities available to the public – state representatives could attend a conference hosted by the DOE, or provide comments in response to the DOE’s public invitations for comments. 631 F.3d 1072 at 1085-1086. Here, by contrast, there were direct communications among high-level personnel from both the State, including Governor McMaster himself, and the Federal Defendants, addressing the substance of the future of the DOE’s efforts to remove plutonium from South Carolina. The State was not treated as another member of the public, but was in fact given direct access to visit the site itself, attending a meeting with high-level DOE officials at DOE headquarters, and having multiple communications directly with the Secretary himself. DOE has satisfied any plausible construction of the requirement to “consult:” the DOE communicated with, and listened to the views of the Governor prior to taking any formal action related to the disposition of surplus defense plutonium at SRS. The fact that the Federal Defendants ultimately disagreed with the Governor regarding the best course of action does not negate the fact that the Federal Defendants engaged in a meaningful exchange of information and views with Governor McMaster months prior to making any decision. Therefore, the State is not likely to succeed on the merits of its claim that the Secretary of Energy failed to consult with Governor McMaster prior to reaching his May 10, 2018 decisions.

2. *Violation of NEPA – Failure to Prepare a Supplemental EIS for 50+ Years of Storage of Plutonium at SRS.*

i. NEPA

NEPA directs all federal agencies to assess the environmental impact of proposed actions that significantly affect the quality of the environment. 42 U.S.C.A. § 4332(2)(C). NEPA was enacted to ensure that federal agencies carefully and fully contemplate the environmental impact of their actions and to ensure that sufficient information on the environmental impact is made available to the public before actions are taken. 42 U.S.C.A. § 4342; *see* 40 C.F.R. §§ 1500-1508 (implementing regulations of the Council on Environmental Quality); 10 C.F.R. §§ 1021.100 *et seq.* (DOE implementing regulations of NEPA).

NEPA requires federal agencies to prepare an EIS when a major federal action is proposed that may significantly affect the quality of the environment. 42 U.S.C.A. § 4332(2)(C); 40 C.F.R. § 1501.4(a)(1); 10 C.F.R. § 1021.310. An EIS is a “detailed written statement” that “provide[s] full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. §§ 1502.1, 1508.11. If after an EIS has been prepared for a proposed action, the federal agency makes substantial changes in the proposed action or there are new circumstances bearing on the proposed action or its impacts, the agency must prepare a supplemental EIS. 40 C.F.R. § 1502.9(c); *see* 10 C.F.R. § 1021.314 (“DOE shall prepare a supplemental EIS if there are substantial changes to the proposal or significant new circumstances or information relevant to environmental concerns....”).

Importantly, the governing regulations state that during the NEPA process “[a]gencies shall not commit resources prejudicing selection of alternatives before making a final

decision.” 40 C.F.R. § 1502.2. Therefore, “[u]ntil an agency issues a record of decision..., no action concerning the proposal shall be taken which would: (1) Have an adverse environmental impact; or (2) Limit the choice of reasonable alternatives.” 40 C.F.R. 1506.1(a); *see* 10 C.F.R. § 1021.211.

ii. NEPA and the MOX Project

DOE and NNSA must comply with NEPA when rendering decisions and taking action related to the disposition of defense plutonium at SRS. *See* 50 U.S.C.A. § 2461 (requiring the NNSA to comply with “all applicable environmental ... requirements.”); 50 U.S.C.A. § 2566 (requiring NEPA compliance for MOX-related decisions). There are a multitude of NEPA-related documents that have been promulgated and issued regarding the selection of the MOX process and the plutonium disposition pathway. Most of these documents have been cited at various times between the parties in the prior and present litigation between the parties regarding the MOX Project.

iii. Plutonium at SRS

The Federal Defendants previously informed the court that decisions involving “a substance with the potential to have as much impact on the environment as plutonium” should be subject to “a very thorough, deliberate process.” *South Carolina v. United States*, 1:16-cv-00391-JMC (ECF No. 100 at 16). As the Federal Defendants advised the Fourth Circuit in their appeal of the court’s Order to remove plutonium in accordance with the statute:

“Unfortunately, the same nuclear properties of plutonium that make it attractive to science also make this element hazardous to human beings.” Many forms of plutonium can spontaneously ignite when exposed to air. In addition, plutonium’s radioactivity requires “a comprehensive safety program[]” involving “planning, personnel practices and engineered controls,” as well as “mass limitations, training, procedures, postings, personnel and area radiation monitoring, and emergency response.”

Br. of United States at 2, No. 18-1148 (4th Cir. March 19, 2018) (internal citations omitted).

In its decision approving the MOX Facility construction, the NRC stated:

The primary benefit of operation of the proposed MOX facility would be the resulting reduction in the supply of weapons-grade plutonium available for unauthorized use once the plutonium component of MOX fuel has been irradiated in commercial nuclear reactors. *Converting surplus plutonium in this manner is viewed as being a safer use/disposition strategy than the continued storage of surplus plutonium at DOE sites*, as would occur under the no-action alternative, since it would reduce the number of locations where the various forms of plutonium are stored (DOE 1997).²⁰

This pronouncement is true, in part, because radiation exposure to the public is greater in a “no action” alternative than with the MOX Project. As NRC has found, “continued storage would result in higher annual impacts” of public radiation exposure than implementation of the MOX Project.²¹

In other words, the Federal Defendants acknowledge and admit that the continued storage and presence of plutonium at SRS constitutes a significant environmental impact that must be properly analyzed under NEPA.

iv. No analysis of 50+ year storage

The EIS initially designating SRS as the location for the MOX Facility and the transfer and storage of 34 metric tons of defense plutonium at SRS was issued in December 1996 (“the PEIS”). The PEIS analyzed and evaluated the storage of weapons-grade plutonium at SRS for a period of up to 50 years. *See Hodges v. Abraham*, 300 F.3d 432, 447 (4th Cir. 2002) (“By its 1996 PEIS, the DOE had examined various options for the long-term storage of surplus plutonium ... at SRS for up to fifty years.”). There have been supplements and updates since that time, but no evaluation or analysis has been undertaken that reviewed the storage at SRS of weapons-grade plutonium for a period longer than 50 years. The Federal Defendants posit that

²⁰ Compl. Ex. 16, NRC EIS at 2-36 (emphasis added).

²¹ *Id.* at 4-96.

because DOE has thoroughly analyzed the potential environmental impacts of storing plutonium at SRS for up to 50 years, has not indicated it intends to exceed that storage period, and has not made any financial decision or commitment to the Dilute and Dispose approach, it is not required to produce a supplemental EIS in connection to its decision to terminate the MOX Project and pursue the Dilute and Dispose approach. (ECF No. 19 at 14.) However, as discussed below, the court finds that the May 10 decisions regarding the MOX Project are subject to NEPA and require a supplemental EIS.

v. No other disposal or removal alternative

The plutonium at SRS can be divided into two general categories—the plutonium intended for disposition through the MOX Facility and the plutonium not intended for MOX disposition. The ongoing Dilute and Dispose approach is limited in resources and legal authority and is not applicable to the plutonium intended for disposition through the MOX Facility.

In fact, the Federal Defendants asked the National Academies of Science to “evaluate the general viability of the DOE’s plans for disposing of surplus plutonium in WIPP to support U.S. commitments under the Plutonium Management and Disposition Agreement, identify gaps, and recommend actions that could be taken by DOE and others to address those gaps.”²² That study is not anticipated to be completed until 2019. Moreover, the supplemental EIS that was performed resulting in the record of decision published on April 5, 2016 assigning Dilute and Dispose as the preferred alternative to dispose of the non-MOXable plutonium pursuant to NEPA specifically disclaimed reconsidering MOX as the disposition pathway for the MOXable 34 metric tons of plutonium.²³

²² NAS, Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, DELS-NRSB- 17-03, Project Scope (emphasis added).

²³ Compl. Ex. 27, DOE, *ROD for Surplus Plutonium Disposition* (April 5, 2016); Compl. Ex. 26,

When the U.S. Environmental Protection Agency (“EPA”) was asked its opinion on utilizing Dilute and Dispose for the plutonium intended for MOX disposition, it pointed out the NEPA and environmental analysis that still had to be done. Specifically, the EPA stated:

There would be many steps and some time before the EPA formally becomes involved in exercising its regulatory responsibilities associated with the possible disposal of the 34 MT of plutonium at the WIPP. This includes the NEPA activities that the DOE would be required to do.

Compl. Ex. 28, Ltr. of EPA dated April 2, 2018. Importantly, the 2002 Report to Congress acknowledges that storage without a disposition “would likely require additional NEPA review and public meetings.” (ECF No. 1-7 at 4-26.) The Report further states that storage without disposition would be a “significant departure from DOE’s current decisions and commitments.” (*Id.* at 4-27.)

In essence, the crux of the Federal Defendants’ argument in regard to a NEPA violation is that the State should trust that by terminating the MOX Project, the Federal Defendants won’t exceed the 50-year storage mark. However, the court declines to base its decision on the word of the Federal Government as its repeated actions in regard to the MOX Project have called into question the viability of such an outcome. Further, the court finds that pursuing the Dilute and Dispose approach would have a significant impact on the environment (as evidenced by the prior environmental impact statements issued by the Federal Defendants and by the NRC). Therefore, it is necessary that the Federal Defendants produce a supplemental EIS that addresses the conceivability, both practically and legally, of such a strategy. As such, the State will likely

Final SPD Supplemental EIS, Foreword (“Under all alternatives, DOE would also dispos[e] as MOX fuel 34 metric tons (37.5 tons) of surplus plutonium in accordance with previous decisions. The 34 metric tons (37.5 tons) of plutonium would be fabricated into MOX fuel at [the MOX Facility] for use at domestic commercial nuclear power reactors.”).

succeed on the merits of its claim that the May 10, 2018 decisions violated NEPA.

3. *Violation of NDAA FY18 and CAA FY18 – Failure to Meet Waiver Certification Requirements*

The State is likely to succeed on its claim pursuant to the APA that the Secretary's May 10 commitment and certification that the requirements of Section 3121 of NDAA FY 18 and Section 309 of the CAA FY18 had been met is arbitrary and capricious because they have no basis in law or fact. Pursuant to NDAA FY18 § 3121(b)(1), in order to waive the expenditure restrictions, the Secretary must provide both a commitment to remove the plutonium from South Carolina and a certification of a less expensive alternative option. §3121(b)(1).

i. Commitment to Remove the Plutonium from South Carolina

The Federal Defendants argue that “Congress did not set forth any specific level of proof that the Secretary must meet in order to satisfy any particular commitment requirement.” (ECF No. 19 23-24.) The court declines to accept an argument that allows the Secretary to make commitments and certifications not supported by facts.

In the May 10, 2018 decision, the Secretary of Energy provides, “I confirm that the Department is committed to removing plutonium from South Carolina intended to be disposed of in the MOX facility[.]” in an apparent attempt to satisfy Section 3121(b)(1)(A) of the NDAA FY18. The stated primary basis for this commitment is that “[the Federal Defendants] are currently processing plutonium in South Carolina for shipment to the WIPP and intend to continue to do so.” However, none of the defense plutonium that the Federal Defendants claim is currently being processed in South Carolina for shipment to WIPP was intended to be disposed of by the MOX Facility. Accordingly, this fact is irrelevant to and provides no support for the Secretary's commitment to remove plutonium from South Carolina that is intended to be disposed of in the MOX Facility, and thus, the Federal Defendants have relied on factors

which Congress has not intended it to consider. *Id.*

Further, the Secretary avers that the Federal Defendants' commitment to removal is supported by the fact that they are "planning to install additional equipment for processing plutonium [pursuant to the Dilute and Dispose Approach] for removal from South Carolina and to increase the rate at which this removal can be carried out." The Secretary also states that the Federal Defendants "are exploring whether any of the plutonium currently in South Carolina can be moved elsewhere for programmatic uses." Neither of these statements presents evidence or support of a legitimate commitment to the removal of the plutonium intended to be disposed of in the MOX Facility. There has been no NEPA analysis of the Dilute and Dispose approach or the storage of an additional 34 metric tons of weapons-grade plutonium at WIPP, and the EPA has stated that the requisite NEPA analyses and other studies for the storage of the plutonium at WIPP will take "many years."²⁴ Moreover, under applicable law and the Federal Defendants' permits for WIPP, the Federal Defendants are not currently permitted to store an additional 34 metric tons of weapons-grade plutonium at WIPP.

The Federal Defendants are attempting to have it both ways. The basis for their "commitment" to remove plutonium and their basis for terminating the MOX Project is that they purportedly have an alternative for disposition and removal of the MOXable plutonium from South Carolina: "Dilute and Dispose." But they also claim they did not have to conduct any NEPA analysis for the "Dilute and Dispose" approach yet because they have not made any final decision or commitment to the "Dilute and Dispose" approach (notwithstanding the May 10 decision letter). These two arguments are mutually exclusive. If, in fact, there has been no commitment to the "Dilute and Dispose" approach because it is still in the conceptual phase,

²⁴ Compl. Ex. 28, Ltr. of EPA dated April 2, 2018.

then there is no basis for the Secretary’s purported commitment to the removal of the plutonium from South Carolina. If, however, the Federal Defendants have made a decision to move forward with the “Dilute and Dispose” approach, then it is subject to challenge as a final agency action and would fail on the merits because no NEPA analysis has been conducted. Either way, the Secretary’s commitment is invalid.

ii. Certification of a Less Expensive Alternative Option

The Federal Defendants’ estimates used for the lifecycle costs of the MOX Project and the Dilute and Dispose approach are not of comparable accuracy pursuant to the certification requirement under Section 3121(b)(2) of the NDAA FY18. Section 3121(b)(1)(B)(ii) requires the lifecycle cost for the alternative to be conducted according to GAO best practices, and Section (b)(2) requires that the MOX estimate be of comparable accuracy. The estimated lifecycle cost completed in September 2016 for the MOX Project to which the Federal Defendants compared to the Dilute and Dispose lifecycle cost estimate was not determined in a manner comparable to GAO best practices, as GAO determined a few months ago and the Federal Defendants admit.²⁵ Accordingly, GAO reported:

In our February 2014 report, we recommended that NNSA revise and update the Plutonium Disposition Program’s life-cycle cost estimate using the MOX approach following our cost estimating best practices, such as conducting an independent cost estimate. NNSA generally agreed with our recommendation, but has not yet implemented it . . . Based on the findings of our review of NNSA’s revised life-cycle cost estimate, we continue to believe that our recommendation remains

²⁵ Compl. Ex. 32, *GAO Plutonium Disposition Report* (“DOE’s National Nuclear Security Administration (NNSA) has not yet applied best practices when revising its life-cycle cost estimate of \$56 billion for the Plutonium Disposition Program using the MOX approach, as GAO previously recommended.”); Compl. Ex. 29, ICE Report at 48 (“The GAO notes, however, in their report ‘Plutonium Disposition: Proposed Dilute and Dispose Approach Highlights Need for More Work at the Waste Isolation Pilot Plant’ (GAO-17-390) that the 2016 MOX fuel program lifecycle estimate *does not exhibit the characteristics of an estimate developed in alignment with GAO best practices (and was never intended as such).*” (emphasis added)).

valid.²⁶

The Federal Defendants argue that they adjusted the 2016 MOX Project lifecycle cost estimate to make it of comparable accuracy to the Dilute and Dispose approach, which was conducted according to GAO best practices. (ECF No. 19-20 at ¶ 6-7.) However, the court finds this estimate is unlikely to fulfil the comparable accuracy requirement of Section (b)(2). In short, the State is likely to demonstrate that a certification that the lifecycle cost estimates for the Dilute and Dispose approach and the MOX Project are of comparable accuracy cannot be made until a new estimate of the MOX approach following GAO best practices and using similar or comparable underlying assumptions to those used in the Dilute and Dispose approach is prepared. Therefore, the Secretary’s certification that the lifecycle estimates are of comparable accuracy is unsupported by the “relevant data” and does not meet the requirements of Section 3121(b)(2) of the NDAA FY18. *Motor Vehicle Mfrs.*, 463 U.S. at 43.

iii. Statutory or Regulatory Changes

Section 3121(b)(1)(C) of the NDAA FY18 requires the Secretary to report to Congress “the details of any statutory or regulatory changes necessary to complete the alternative option.” The Secretary’s letter did not provide any details of the statutory or regulatory changes that are necessary to complete the proposed Dilute and Dispose approach, and thus, the requirement has not been met. First, although recognizing the “capacity issues related to the receipt of the full 34 metric tons at WIPP,” the Secretary states that all that is needed to proceed with the Dilute and Dispose approach is a proposed permit modification. However, DOE and NNSA have no basis in law or fact to simply assume that any permit modification will be granted. In fact, just

²⁶ *Id.* at 24-25.

this past Friday—June 1, 2018—the New Mexico Environment Department rejected the Federal Defendants’ attempt to fast-track their permit modification request and is now requiring a more extensive review of the request because of the “significant public concern and complex nature of the proposed change.” (ECF No. 21-2.) The Federal Defendants cannot use this assumption to avoid the necessary reporting to Congress. In 2014, DOE issued a report finding that “[d]isposal of the entire 34 MT of material in WIPP would require amendment of the WIPP Land Withdrawal Act. As with any location considered for this disposal mission, significant engagement with federal, state, and local representatives would be required. Implementing such an option would require Congressional action.” (ECF No. 21-1.)

The second statute that would need to be modified for the Federal Defendants to proceed with the Dilute and Dispose approach and that the Federal Defendants did not disclose to Congress is Section 2566. This statute would need to be amended because it requires removal by January 1, 2022 of all the defense plutonium moved to South Carolina as of April 15, 2002. Under the Federal Defendants’ Dilute and Dispose approach, they would not, according to their own estimates, be able to remove even one metric ton of plutonium from South Carolina until at least 2025, and they would also plan to import over 26 metric tons of plutonium into the State. The Federal Defendants therefore cannot legally implement the Dilute and Dispose approach unless Section 2566 is modified.

Because the Secretary’s purported commitments and certifications have no basis in law or fact, the State is likely to succeed on its claim that the Federal Defendants’ decision to terminate the MOX Facility is arbitrary and capricious in violation of NDAA FY18 and CAA FY18.

C. Irreparable Harm

Without a preliminary injunction, the State will suffer irreparable harm. The Federal Defendants have already issued a Partial Stop Work Order to the construction contractor that halted any new contracts or new hires at SRS for the MOX Project.²⁷ The Federal Defendants intend to issue a full stop work order to begin the wind-down of the MOX Project and termination of employees at SRS related to the MOX Project on or about June 11, 2018, which is the first business day after the 30-day period following Secretary Perry's certification during which the Federal Defendants cannot use funds provided for the construction of the MOX Facility to eliminate the Project. CAA FY18, § 309(c)(2).

The Federal Defendants seem to couch the State's main argument of irreparable harm to be the injuries of the individual SRS employees and the economic loss to the State. However, the harm the State seems to claim is that the Full Stop Work Order would be the "event horizon" for the termination of the MOX Project. Once the labor force is lost, the MOX Project is likely discontinued without an alternate approved or authorized disposition strategy or any removal strategy for the weapons-grade plutonium stored at SRS that was intended to be processed at the MOX Facility.

Moreover, the implementation of the Federal Defendants' May 10 decisions without the creation of a supplemental EIC in and of itself creates irreparable harm. When a federal agency undertakes actions that would significantly affect the environment, NEPA requires the agency to take a hard look at the impact of those actions. *Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 181 (4th Cir. 2005). Accordingly, "irreparable harm [exists] when agencies become

²⁷ Compl. ¶ 111; Compl. Ex. 30, May 14, 2018 NNSA Letter to CB&I AREVA MOX Services, LLC RE: Contract DE-AC02-99CH10888 (Mixed Oxide Fuel Fabrication Facility).

entrenched in a decision uninformed by the proper NEPA process because they have made commitments or taken action to implement the uninformed decision.” *Conservation Law Found. Inc. v. Busey*, 79 F.3d 1250, 1271 (1st Cir. 1996). This harm “is not merely a procedural harm, but is ‘the added risk to the environment that takes place when governmental decision makers make up their minds without having before them an analysis (with prior public comment) of the likely effects of their decision upon the environment.’” *Id.* at 1271-72 (quoting *Sierra Club v. Marsh*, 872 F.2d 497 (1st Cir. 1989)).

If the Full Stop Work Order is issued, the State also will be robbed of the opportunity to obtain a meaningful judgment on the merits of its claims that the Federal Defendants’ decision to terminate the MOX Facility and leave South Carolina as the permanent repository for plutonium is unlawful. *Int’l Refugee Assistance Project v. Trump*, 883 F.3d 233, 270 (4th Cir. 2018) (“[I]rreparable harm occurs when the threatened injury impairs the court’s ability to grant an effective remedy.”); *In re Microsoft Corp.*, 333 F.3d at 525 (“The traditional office of a preliminary injunction is to protect the status quo and to prevent irreparable harm during the pendency of a lawsuit ultimately to preserve the court’s ability to render a meaningful judgment on the merits.”). The Federal Defendants’ argument advanced at the hearing that there is a scant possibility that the MOX Facility could be restarted or refunded at some unknown future date is unavailing. That claim is directly contradicted by the evidence submitted by the Federal Defendants as well as the practical effect of the Full Stop Work Order. In addition, given the demand for the experienced and skilled craftsman, the loss of the labor force will likely occur immediately—not the 60 days the Federal Defendants contend it would take because of the WARN Act “notice” requirements. (*See* ECF No. 21-3.) Therefore, the State will be the party to suffer the irreparable harm.

D. Balance of Equities

The court agrees that the financial impact resulting from a preliminary injunction weighs in favor of the Federal Defendants.²⁸ The Federal Defendants maintain that the continuation of MOX construction involves taxpayer expenditures of approximately \$1.2 million per day.²⁹ (ECF No. 19-1 at ¶ 22.) The court acknowledges the significance of that proposed amount. However, the balance of equities still heavily favors the State. As discussed, the injunction the State seeks will simply preserve the status quo. Congress has instructed the Federal Defendants to continue construction of the MOX Facility this fiscal year and already appropriated funds for that specific purpose. Through Section 2566, Congress also has directed the Federal Defendants to pursue construction of the MOX Facility. The requested preliminary injunction only seeks to maintain that construction (and the associated labor force) until the court can make a determination as to the legality of the Federal Defendants' decision to terminate the Project.

Importantly, Congress has not approved or authorized the Dilute and Dispose approach as a replacement for the MOX Project. Therefore, if the Federal Defendants' agency action is not enjoined, the Federal Defendants will leave the United States with no disposition pathway for 34 metric tons of weapons-grade plutonium, reversing and rendering pointless over 20 years of studies, decisions, efforts, and substantial monetary investments to develop the MOX Facility to complete the United States' disposition mission.

In addition, the United States' foreign interests are not furthered by terminating the MOX Facility. One of the purposes of pursuing the MOX Project was to meet the United States' obligations pursuant to the Plutonium Management and Disposition Agreement ("PMDA") with

²⁸ This statement is also pertinent to the public interest discussion below.

²⁹ The State claims this amount is not based on any actual calculation provided by the Federal Defendants and is based on invoices rather than payments. (*See* ECF No. 21 at 19.)

Russia, whereby each country agreed to dispose of no less than 34 metric tons of weapons-grade plutonium.³⁰ As support of the statutory requirements set forth in Section 2566 for construction and operation of the MOX Facility, Congress specifically found:

- (1) In September 2000, the United States and the Russian Federation signed PMDA by which each agreed to dispose of 34 metric tons of weapons-grade plutonium.
- (2) The agreement with Russia is a significant step toward safeguarding nuclear materials and preventing their diversion to rogue states and terrorists.
- (3) The Department of Energy plans to dispose of 34 metric tons of weapons-grade plutonium in the United States before the end of 2019 by converting the plutonium to a mixed-oxide fuel to be used in commercial nuclear power reactors.
- (4) The Department has formulated a plan for implementing the agreement with Russia through construction of a mixed-oxide fuel fabrication facility, the so-called MOX facility, and a pit disassembly and conversion facility at the Savannah River Site, Aiken, South Carolina.

NDAA FY03, Pub. L. No. 107-314, 116 Stat. 2458, Subtitle E, § 3181.

DOE used the PMDA, and the need to pursue the MOX Project, as one of the primary reasons for DOE's need to ship defense plutonium into the State in the first place. In response to the State's challenge to the shipment of plutonium into the State in 2002, Linton F. Brooks, then-Deputy Administrator for Defense Nuclear Nonproliferation for DOE/NNSA, testified that any delay or uncertainty in the MOX Project could "kill" the PMDA.³¹ He further testified that failure to comply with the PMDA "would call into question the United States' commitment to other nonproliferation efforts and diminish our credibility in continuing to provide leadership on these issues internationally."³² Therefore, because the MOX approach is the only method

³⁰ Compl. Ex. 14, PMDA (Sept. 1, 2000); *see* Compl. Ex. 15, Congressional Research Serv., Mem., *U.S.-Russia Plutonium Management Disposition Agreement*, dated Oct. 20, 2015 (describing history of PMDA) (hereinafter *CRS PMDA Report*)

³¹ Compl. Ex. 18, Brooks Aff, *Hodges v. Abraham*, C/A No. 1:02-cv-01426-CMC.

³² *Id.*

approved under the PMDA for plutonium disposition, the decision to terminate the MOX Facility does not further the United States' foreign policy interests. This exact position was previously taken by DOE when it stated:

[the long-term storage option without disposition] does not achieve the U.S. plutonium disposition mission and it renounces the U.S.-Russian PMDA.... This option would represent a reversal of the U.S. position on disposition of surplus plutonium, be derided internationally, and be opposed by the states and the public.³³

In other words, the Federal Defendants have previously recognized that the very path they now desire to take violates an international nonproliferation agreement with Russia.

The past history between South Carolina and the Federal Defendants with respect to the MOX Facility and weapons-grade plutonium located in the State also demonstrates that equity favors the State. Beginning in the late 1990s, DOE and its officials made countless commitments to the State, which the State relied on in agreeing to accept the defense plutonium that DOE insisted it urgently needed to ship to South Carolina. In particular, DOE committed to ensuring that the State not become the “dumping ground” for plutonium and, thus, committed to building the MOX Facility and expeditiously removing plutonium from the State if the MOX Facility was not timely built for any reason.³⁴ These commitments were then codified in federal law through Section 2566, with the additional commitment of monetary payments to the State if the defense plutonium moved to the State was not timely processed or removed from the State.

Now, DOE is renegeing on its promises made over the course of the last two decades. The MOX Facility has not been timely built, no defense plutonium intended for MOX disposition

³³ Compl. Ex. 7, *Report to Congress*.

³⁴ See Compl. Ex. 7, *Report to Congress* 5-2 (“Storage in place undercuts existing commitments to the states, particularly South Carolina, which is counting on disposition as a means to avoid becoming a permanent ‘dumping ground’ for surplus weapons-grade plutonium by providing a pathway out of the site for plutonium brought there for disposition.”).

has been removed from the State, and no monetary payments have been made. Further, the Federal Defendants have contested their statutory obligations to remove the plutonium and make the monetary payments. Accordingly, the balance of equities or hardships related to the MOX Facility weighs heavily for the State.

E. Public Interest

Requiring the government to act in accordance with the law is a public interest of the highest order. *See Seattle Audubon Soc’y v. Evans*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (citing *Olmstead v. United States*, 277 U.S. 438, 485 (1928) (Brandeis, J., dissenting)), *aff’d in relevant part*, 952 F.2d 297 (9th Cir. 1991). Injunctive relief serves the public interest where it furthers the clearly-expressed purposes of a statute. *Johnson v. U.S. Dep’t of Agric.*, 734 F.2d 774, 788 (11th Cir. 1984) (“Congressional intent and statutory purpose can be taken as a statement of public interest.”). “Good administration of [a] statute is in the public interest and that will be promoted by taking timely steps when necessary to prevent violations even when they are about to occur or prevent their continuance after they have begun.” *Walling v. Brooklyn Braid Co.*, 152 F.2d 938 (2d Cir. 1945). Compliance with NEPA also furthers the public interest in having public officials, and the public itself, fully informed about the likely consequences of actions prior to those actions being taken. 40 C.F.R. § 1500.1(b) (“NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.”); 40 C.F.R. § 1502.5 (environmental analysis must be completed “early enough so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made”).

NEPA required the Federal Defendants to take a “hard look” at the environmental consequences of its decision to terminate the MOX Facility and render South Carolina the

permanent repository for weapons-grade plutonium. The Federal Defendants did not do so, and thus, “the public interest expressed by Congress [has been] frustrated by the [F]ederal [D]efendants not complying with NEPA.” *Fund for Animals v. Clark*, 27 F. Supp. 2d 8, 15 (D.D.C. 1998). Accordingly, an injunction preventing the Federal Defendants from taking any action to terminate the MOX Facility until NEPA compliance can be assured furthers the public interest.

Through Section 3121 of NDAA FY 18 and Section 309 of the CAA FY18, Congress mandated that the Federal Defendants use federal funds to continue construction of the MOX Facility during the current fiscal year. The only way the Federal Defendants could avoid this mandate was by meeting the commitment and certification requirements of those respective statutes. Implicit in those statutory requirements, however, is that the Secretary’s commitments and certifications are made in good faith and are supported by fact and law. By this decision, decades of the United States’ plutonium disposition policy is overturned and, as discussed above, the Federal Defendants will violate one of the country’s international nonproliferation agreements. Accordingly, the public interest is served by ensuring that the MOX Facility is not terminated before the legality of the Secretary’s commitments and certifications can be fully vetted by the court.

V. CONCLUSION

Based on the foregoing, the court **GRANTS** the State’s Motion for Preliminary Injunction (ECF No. 5). During the pendency of this lawsuit, the court enjoins the Federal Defendants’ May 10 decisions to terminate and cease construction of the MOX Facility and its intent to pursue the Dilute and Dispose approach to plutonium disposition. The Partial Stop Work Order issued on May 14, 2018 is vacated and the Federal Defendants are prevented from issuing a full stop work

order on or before June 11, 2018, or thereafter, unless otherwise determined by this court. Consequently, the Federal Defendants are to maintain the status quo by continuing the MOX Project. The State is ordered to pay a bond in the amount of \$100.00 to the Clerk of Court for the United States District Court for the District of South Carolina by Friday, June 8, 2018 at 4 p.m.³⁵

IT IS SO ORDERED.



United States District Judge

June 7, 2018
Columbia, South Carolina

³⁵ Federal Rule of Civil Procedure 65(c) requires a court issuing a preliminary injunction order to do so “only if the movant gives security in an amount that the court considers proper” to provide redress to the enjoined party if the injunction is later found to be improper. Fed. R. Civ. P. 65(c). The language of Rule 65 requires the court to set a bond when issuing a preliminary injunction. *Id.* However, it gives the court discretion in deciding the proper amount. *Id.* Courts have exercised this discretion to set nominal bond amounts in public interest litigation. 11A Charles Alan Wright, Arthur R. Miller, & Edward H. Cooper, FEDERAL PRACTICE AND PROCEDURE § 2954 (3rd ed. 2018). Allowing a public interest exception prevents entities from skirting judicial oversight by requesting a high security. *Powelton Civic Home Owners Ass’n v. Dep’t of Housing and Urban Dev.*, 284 F. Supp. 809, 840-41 (E.D. Pa. 1968) (“We cannot accept the proposition that Rule 65(c) was intended to raise virtually insuperable financial barriers insulating the agency’s decision from effective judicial scrutiny.”). Moreover, when a party is seeking to vindicate the public interest served by NEPA, a nominal bond amount is proper. *Davis v. Mineta*, 302 F.3d 1104, 1126 (10th Cir. 2002).